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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,586	02/21/2000	David R. Irvin	P-4015.552/P11677(US1)	8268

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EXAMINER	
MILORD, MARCEAU	
ART UNIT	**PAPER NUMBER**
2682	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/507,586	IRVIN ET AL.	
	Examiner	Art Unit	
	Marceau Milord	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *33-41* is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-5, 8-14, 20-26, 29-32, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen et al (US Patent No 5991645) in view of Hahn et al (US Patent No 6230029 B1) and Giel et al (US Patent No 5881377).

Regarding claims 1-5, Yuen et al discloses a wireless headset (figs. 3-4) for use with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3) including an audio interface adapted to provide audio input and output and a wireless communications interface adapted to provide a wireless communications link with the base unit (col. 6, line 57- col. 7, line 7) a sensor for asserting a sensor output signal in response to sensing a predetermined condition (col. 12, line 42-cool. 12, line 26; col. 7, lines 8-58; col. 9, line 51-col. 10, line 29).

However, Yuen et al does not specifically disclose a sensor for asserting a sensor output signal in response to sensing a predetermined condition; and a power control circuit adapted to

activate at least a portion of said circuit in response to said sensor output signal; and said power control circuit is further adapted to activate said audio interface in said headset circuit in response to a link signal from said activated wireless communications interface.

Hahn et al, on the other hand, from the same field of endeavor, discloses a wireless headset system for use with mobile phones, and which incorporates a wireless headset, which communicates with a base station. The wireless headset system comprises a base station which includes a power interface for coupling the base station to an external source of electrical power, a phone interface for electrically coupling the base station to a mobile phone, to allow the base station to communicate with the phone, and a second transceiver for wirelessly communicating between the phone interface and the first transceiver (col. 2, lines 1-55; col. 3, lines 8-30). The wireless headset module and the base station communicate with each other via magnetic inductive coupling. The base station converts the signals received from wireless headset module into signals that the mobile phone can utilize and the signals from the mobile phone into signals at the wireless headset module can utilize. The base station can also charge the batteries of the attached mobile phone when connected to an external power source (col. 5, line 24-col. 6, line 40; col. 7, lines 22-67).

Giel et al discloses a method and apparatus control blanking of a display in a communication device such as a battery-powered radiotelephone. The communication device includes a clock operated blanking timer. When the blanking timer elapses, the communication device blanks the display a predetermined time after a key press of a keypad. A switch detects when the communication device is in use. In response to this detection, the communication device maintains supply of operating power to the display, overriding the blanking timer. When a

user is holding the communication device adjacent to the user's head, an earpiece sensor provides an indication of this condition. In response to the indication, the display is immediately blanked to conserve operating power in the battery (col. 3, lines 137; col. 4, lines 3-37). Furthermore, the earpiece sensor provides an indication when the communication device is located adjacent to a user's head. This sensor is used to detect proximity to the user's head, such as a heat-sensitive switch or proximity detector or optoelectronic switch. The earpiece sensor is coupled to the controller for providing the indication to the controller. The switch is responsive to grasping of the grips for providing a blanking control signal. Further, the switch remains closed when the user grasps the communication device and holds the communication device adjacent to the user's head. Thus, the switch is closeable in response to operation of the communication device. The controller is coupled to the switch to detect the blanking control signal (col. 5, line 5- col. 6, line 65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Giel to the modified system of Hahn and Yuen in order to use an earpiece sensor that is coupled to the controller for providing an indication to the controller and detecting the blanking control signal.

Regarding claim 8, Yuen et al as modified discloses a wireless headset (figs. 3-4) for use with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3), wherein the predetermined condition is a movement of said wireless headset, and further wherein said sensor is a motion sensor responsive to the movement (col. 6, lines 34-54; col. 7, lines 8-58).

Regarding claim 9, Yuen et al as modified discloses a wireless headset (figs. 3-4) for use with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3), wherein said

motion sensor includes an output conditioning circuit for asserting said sensor output signal when the movement exceeds a defined threshold (col. 12, lines 1-26).

Regarding claim 10, Yuen et al as modified discloses a wireless headset (figs. 3-4) for use with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3), wherein the predetermined condition is placement of said wireless headset upon a users body, and further wherein said sensor is a proximity sensor responsive to said wireless headset being proximate to the user's body (col. 7, line 8- col. 8, line 49).

Regarding claim 11, Yuen et al as modified discloses a wireless headset (figs. 3-4) for use with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3), wherein said proximity sensor is a contact switch responsive to contact between the users body and said wireless headset (col. 7, lines 18-54; col. 8, lines 30-58).

Regarding claim 12, Yuen et al as modified discloses a wireless headset (figs. 3-4) for use with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3), wherein the predetermined condition is one or more physical orientations of said wireless headset, and further wherein said sensor is an attitude sensor responsive to the one or more physical orientations (col. 6, lines 34-54; col. 7, lines 8-58).

Regarding claims 13-14, 20, Yuen et al discloses a wireless headset for use (figs. 3-4) with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3) including an audio interface for audio input and output and a wireless communications interface for wireless communications with the base unit (col. 6, line 57- col. 7, line 7), said headset circuit having at least three states including an inactive state, a sleep state, and an active state; a sensor for

asserting a sensor output signal in response to sensing a predetermined condition (col. 12, line 42-cool. 12, line 26; col. 7, lines 8-58; col. 9, line 51-col. 10, line 29).

However, Yuen et al does not specifically disclose a power control circuit operatively associated with said sensor and said headset circuit for controlling said at least three states of said headset circuit; wherein said power control circuit holds said headset circuit in said inactive state absent said sensor output signal, and further wherein said power control circuit transitions said headset circuit from said inactive state to said sleep state in response to said sensor output signal, and further wherein said power control circuit transitions said headset circuit from said sleep state to active state in response to a link signal asserted by said wireless communications interface while in said sleep state.

Hahn et al, on the other hand, from the same field of endeavor, discloses a wireless headset system for use with mobile phones, and which incorporates a wireless headset, which communicates with a base station. The wireless headset system comprises a base station which includes a power interface for coupling the base station to an external source of electrical power, a phone interface for electrically coupling the base station to a mobile phone, to allow the base station to communicate with the phone, and a second transceiver for wirelessly communicating between the phone interface and the first transceiver (col. 2, lines 1-55; col. 3, lines 8-30). The wireless headset module and the base station communicate with each other via magnetic inductive coupling. The base station converts the signals received from wireless headset module into signals that the mobile phone can utilize and the signals from the mobile phone into signals at the wireless headset module can utilize. The base station can also charge the batteries of the

attached mobile phone when connected to an external power source (col. 5, line 24-col. 6, line 40; col. 7, lines 22-67).

Giel et al discloses a method and apparatus control blanking of a display in a communication device such as a battery-powered radiotelephone. The communication device includes a clock operated blanking timer. When the blanking timer elapses, the communication device blanks the display a predetermined time after a key press of a keypad. A switch detects when the communication device is in use. In response to this detection, the communication device maintains supply of operating power to the display, overriding the blanking timer. When a user is holding the communication device adjacent to the user's head, an earpiece sensor provides an indication of this condition. In response to the indication, the display is immediately blanked to conserve operating power in the battery (col. 3, lines 137; col. 4, lines 3-37). Furthermore, the earpiece sensor provides an indication when the communication device is located adjacent to a user's head. This sensor is used to detect proximity to the user's head, such as a heat-sensitive switch or proximity detector or optoelectronic switch. The earpiece sensor is coupled to the controller for providing the indication to the controller. The switch is responsive to grasping of the grips for providing a blanking control signal. Further, the switch remains closed when the user grasps the communication device and holds the communication device adjacent to the user's head. Thus, the switch is closeable in response to operation of the communication device. The controller is coupled to the switch to detect the blanking control signal (col. 5, line 5- col. 6, line 65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Giel to the modified system of Hahn and Yuen in

order to use an earpiece sensor that is coupled to the controller for providing an indication to the controller and detecting the blanking control signal.

Regarding claim 21, Yuen et al as modified discloses a wireless headset for use (figs. 3-4) with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3), wherein said wireless communications interface periodically monitors for said signal from the base unit (col. 7, lines 8-58).

Regarding claim 22, Yuen et al as modified discloses a wireless headset for use (figs. 3-4) with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3), wherein the predetermined condition is a movement of said wireless headset and said sensor is a motion sensor (col. 6, lines 34-54; col. 7, lines 8-58).

Regarding claim 23, Yuen et al as modified discloses a wireless headset for use (figs. 3-4) with a base unit, said wireless headset comprising: a headset circuit (146 of fig. 3), wherein the predetermined condition is proximity of said wireless headset to a user's body and said sensor is a proximity sensor (col. 7, line 8- col. 8, line 49).

Regarding claims 24-26, 29-32, Yuen et al discloses a method for controlling a wireless headset (figs. 3-4) having a communications circuit and a control circuit (col. 6, line 57- col. 7, line 7), comprising the steps of: disabling said communications circuit via said control circuit; detecting a predetermined condition via a sensor associated with said control circuit while said communications circuit is disabled (col. 12, line 42-cool. 12, line 26; col. 7, lines 8-58; col. 9, line 51-col. 10, line 29).

However, Yuen et al does not specifically disclose the steps of enabling at least a portion of said communications circuit via said control circuit in response to detecting said

predetermined condition; enabling at least a receiver portion of said wireless communications interface in response to detecting said predetermined condition; detecting, via said receiver portion, a signal from the base unit; enabling, via said control circuit, the remaining portion of said communications circuit in response to said detection of said signal from the base unit; wherein said control circuit enables said remaining portion of said communications circuit based on said receiver portion asserting a link signal in response to detecting said signal from the base unit.

Hahn et al, on the other hand, from the same field of endeavor, discloses a wireless headset system for use with mobile phones, and which incorporates a wireless headset, which communicates with a base station. The wireless headset system comprises a base station which includes a power interface for coupling the base station to an external source of electrical power, a phone interface for electrically coupling the base station to a mobile phone, to allow the base station to communicate with the phone, and a second transceiver for wirelessly communicating between the phone interface and the first transceiver (col. 2, lines 1-55; col. 3, lines 8-30). The wireless headset module and the base station communicate with each other via magnetic inductive coupling. The base station converts the signals received from wireless headset module into signals that the mobile phone can utilize and the signals from the mobile phone into signals at the wireless headset module can utilize. The base station can also charge the batteries of the attached mobile phone when connected to an external power source (col. 5, line 24-col. 6, line 40; col. 7, lines 22-67).

Giel et al discloses a method and apparatus control blanking of a display in a communication device such as a battery-powered radiotelephone. The communication device

includes a clock operated blanking timer. When the blanking timer elapses, the communication device blanks the display a predetermined time after a key press of a keypad. A switch detects when the communication device is in use. In response to this detection, the communication device maintains supply of operating power to the display, overriding the blanking timer. When a user is holding the communication device adjacent to the user's head, an earpiece sensor provides an indication of this condition. In response to the indication, the display is immediately blanked to conserve operating power in the battery (col. 3, lines 137; col. 4, lines 3-37). Furthermore, the earpiece sensor provides an indication when the communication device is located adjacent to a user's head. This sensor is used to detect proximity to the user's head, such as a heat-sensitive switch or proximity detector or optoelectronic switch. The earpiece sensor is coupled to the controller for providing the indication to the controller. The switch is responsive to grasping of the grips for providing a blanking control signal. Further, the switch remains closed when the user grasps the communication device and holds the communication device adjacent to the user's head. Thus, the switch is closeable in response to operation of the communication device. The controller is coupled to the switch to detect the blanking control signal (col. 5, line 5- col. 6, line 65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Giel to the modified system of Hahn and Yuen in order to use an earpiece sensor that is coupled to the controller for providing an indication to the controller and detecting the blanking control signal.

Claims 6-7, 15-19, 27-28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen et al (US Patent No 5991645) in view of Hahn et al (US Patent No 6230029 B1) and Giel

et al (US Patent No 5881377) as applied to claims 1,13, 24, 33 above, and further in view of Lucey (US Patent No 6421426 B1).

Regarding claims 6-7, 15-19, 27-28, Yuen, Hahn and Giel disclose everything claimed as explained above except the features of a resettable timer defining a time-out interval, said timer initialized to a beginning of said time-out interval based on said sensor output signal; and the power control circuit disables said headset circuit upon expiration of said resettable timer.

However, Lucey discloses a telephone handset amplifier that includes a switching circuit to permit switching between the remote wireless and the standard handset associated with the host telephone. The timer generates a signal when power is applied. The tone control signals in the remote unit switch the base unit transmitter "ON" for headset mode and "OFF" for headset mode (col. 3, lines 2-24;col. 5, lines 2-36). Furthermore, the base station is responsive to tone control signals, which are transmitted from the remote wireless set. The base station can be turned "ON and OFF" by control signals from the remote wireless set (col. 1-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Lucey to the modified system of Tuoriniemi, Hahn and Yuen in order to allow the remote wireless set to obtain a full battery charge and conserve power.

Allowable Subject Matter

3. Claims 33-41 are allowed.

Response to Arguments

4. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MARCEAU MILORD

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